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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,056	06/20/2003	Joseph P. Fello	03-EDP-132	5535

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EXAMINER

DONOVAN, LINCOLN D

ART UNIT	PAPER NUMBER
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2832

DATE MAILED: 08/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,056

Applicant(s)

FELLO ET AL.

Examiner

Lincoln Donovan

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-19 is/are rejected.
- 7) ☒ Claim(s) 12, 13 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 06-20-03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5-11, 14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mrenna et al. [US 3,950,714] in view of Rosen et al. [US 5,302,786].

Regarding claims 1, 3, 5 Mrenna et al. disclose a circuit breaker [5] comprising:

- a molded housing [11, 13] including at least one recess formed of a first material;
- a pivot pin [41] disposed in the recess of the housing [column 2, lines 54-65] being made of a second material;
- a stationary contact [15] fixed to housing [figure 1];
- a movable contact [17] for engaging the stationary contact attached to an operating arm [37];
- an operating mechanism [figure 1] disposed within the housing for separating the contacts between an open position and a closed position including a cradle [33] having a pivot portion which pivotally engaged with the pivot pin [figure 1];
- a spring biasing means [39] mounted between the cradle and the operating arm; and

- a thermal magnetic trip module [21] including a support latch support for a latch ledge [81] of the cradle.

Mrenna et al. disclose the instant claimed invention except for the pivot pin being formed of a hardened steel material.

Rosen et al. disclose a cradle [40] pivotally supported by a hardened steel pin assembly [47].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use hardened steel for the pin of Mrenna et al., as suggested by Rosen et al., in order to reduce bowing and increase service life.

Regarding claim 16, Mrenna et al., as modified, disclose the instant claimed invention except for the pivot pin being formed of stainless steel.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use stainless steel for the steel pin of Mrenna et al., as modified, for the purpose of preventing premature wear.

Claims 2, 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mrenna et al., as modified, as applied to claim 1 above, and further in view of Seese et al. [US 6,469,600].

Regarding claims 2, 11 and 19, Mrenna et al., as modified, disclose the instant claimed invention except for the pivot pin having a cylindrical shape with a semi-circular portion and the pivot portion of the cradle having a generally u-shape engaging with the semi-circular portion of pivot pin.

Seese et al. disclose a circuit breaker [1] having an operating mechanism [figure 2] within a housing supporting a pivot point [29] having a semi-circular shaped portion and the pivot portion of the cradle having a generally u-shape engaging with the semi-circular shaped pivot portion [figure 2].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the pivot design of Seese et al. for the pivot of Mrenna et al., as modified, for the purpose of facilitating mounting of the operating mechanism within the breaker housing.

Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mrenna et al., as modified, as applied to claims 16 and 1 above, and further in view of Chien et al. [US 5,196,815].

Mrenna et al., as modified, disclose the instant claimed invention except for the housing being formed of glass polyester.

Chien et al. disclose a circuit breaker having a housing formed of glass polyester [column 3, line 64-column 4, line 9].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use glass polyester for the housing of Mrenna et al., as modified, as suggested by Chien et al., for the purpose of providing good electrical insulation.

Allowable Subject Matter

Claims 12-13 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

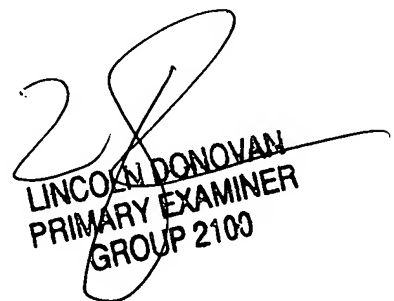
- Kim et al. [US 2002/0011908A1].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lincoln Donovan whose telephone number is (571) 272-1988. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Idd


LINCOLN DONOVAN
PRIMARY EXAMINER
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